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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,563	07/13/2001	Yu Sun	3123-367	2954

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EXAMINER	
SNIEZEK, ANDREW L	

ART UNIT	PAPER NUMBER
2651	5

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/905,563	SUN ET AL.	
	Examiner	Art Unit	
	Andrew L. Sniezek	2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 July 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-52* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8,10,11,13-18,21-29,31,32,34-37,41,43-49 and 51* is/are rejected.

7)☒ Claim(s) *9,12,19,20,30,33,38-40,42,50 and 52* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 July 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

Drawings

New corrected drawings are required in this application because the drawings presented 7/13/01 are sketchy and not considered formal. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Objections

Claims 13 and 22-24 are objected to because of the following informalities: Claim 13, line 15 inadvertently states that the ramp tab "does hit" the crash stop. Examiner believes that applicant intended to state that the ramp tab does not hit the crash stop. Appropriate correction is required. Claims 22-24 are directed to a method, however the claim from which they depend is directed to an apparatus. It is also noted that the specifics of claims 22-24 find antecedent basis from claim 21, not claim 20 as presently set forth. Examiner believes that claim 22 contains a typographical error in that it should state –A method, as claimed in claim 21(not claim 20)--. The following rejections have been made with the assumption that claims 22-24 depend on claim 21 not claim 20.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 49, 51-52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 49 sets forth "said variable factor" which lacks proper antecedent basis. Examiner believes this claim should depend on claim 48 instead of claim 43. Claims 51-52 inherit the limitations of claim 49.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 13-15, 21-24, 34, 43-46 are rejected under 35 U.S.C. 102(b) as being anticipated by applicants admitted prior art as discussed on page 1, line 10 – page 8, line 2 and on page 16, lines 10-11.

Applicants' admitted prior art teaches a disk arrangement that produces velocity profiles to access specific portions of a disk. These profiles are direction specific depending on the present location of the transducer and the desired location of the information to be accessed. Page 7, line 3 – page 8, line 2 specifically discusses a derate seek profile that is used during power loss while in a seek so that damage to the disk does not occur. This prior art arrangement satisfies the limitation of claim 1 and 5. The limitations of claim 2 are satisfied by the discussion on page 7, lines 3-20. The limitations of claims 3-4 are satisfied by page 7, lines 10-15. Claim 13 although written as an apparatus claim sets forth substantially the structure used to perform the method of determining velocity profiles as set forth in claim 1. The structure that accomplishes this velocity profile is also discussed in the prior art at the noted locations. It is noted that the claimed controller is deemed satisfied by the prior art servo system as discussed in the prior art. The limitations of claims 14-15 are similar to those of claims 3 and 4. Claim 21 sets forth similar limitations as set forth in claim 1 with additional limitations directed to acceleration and deceleration portions of the velocity profiles. These additional features are

discussed by the admitted prior art on page 5, lines 15 – page 6, line 3. The claimed maximum track as set forth in claim 22 is deemed to be satisfied by the last track before the head inters the ramp as described in the prior art. The limitations of claims 23-24 are also satisfied by the prior art when the ramp is located at the inner or outer portion of the disk as described on page 2, lines 12-13. Claim 34 substantially sets forth the same limitations as discussed above and therefore rejected for similar reasons. Claim 43 sets forth similar limitations as those discussed with respect to claim 13 with the addition of a reference location and first and second profiles. This location is deemed to be the last track before the head inters the ramp as described in the prior art. Also, the first and second profiles are satisfied by the time in which a derate profile starts, therefore forming two distint profiles. The limitations of claims 44-45 are deemed satisfied when the ramp is located at the inner or outer portion of the disk as described on page 2, lines 12-13. The limitations of claim 46 directed to a predetermined factor is deemed by the inherent deract factor used in the derate profile as discussed by the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-8, 10, 11, 16-18, 25-29, 31, 32, 35-37, 41, 47-49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants' admitted prior art in view of Patton, III.

The teaching of applicants' admitted prior art is discussed above and incorporated herein. Claims 7, 17 further set forth that the adjusting step adjusts the velocity profile by a variable amount. Although, not specifically discussed by applicants admitted prior art is taught by a similar device to Patten, III as discussed in column 5, line 64 – column 6, line 66 so that the actuator does not contact the crash stops at high velocities and at the same time provide a fast parking arrangement. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the variable velocity profile as taught by Patten, III into the arrangement as discussed by applicants admitted prior art to obtain the advantages as pointed out by Patten, III. The limitations of claims 8 and 18 are deemed satisfied by Patten, III by the distance or number of tracks between the present location and parking zone as discussed in column 6 and would have been incorporated in applicants admitted prior art for reasons discussed above. The limitations of claims 10-11 directed to warping factor is deemed satisfied by the velocity of the heads as discussed in column 6, lines 2-5 and would be incorporated in the arrangement of applicants' admitted prior art of reasons discussed above. Claim 25 sets forth a similar method as discussed above but does not use the specific language of "adjusting". The features of claim 25 are deemed satisfied by the operation as discussed in column 5, line 64 - column 6, line 66 for the purpose discussed above. It would have been obvious to one of

ordinary skill in the art at the time of the invention to incorporate these features in the arrangement of applicants admitted prior for these reasons. The limitations of claim 26, 28 are similar as discussed above with respect to claims 7 (velocity profile), the limitations of claim 29 are similar to those of claim 8 and 18, and the limitations of claims 31-32 are similar to those of claims 10-11 as discussed above. The combination of Patten III and applicants admitted prior art for these claims are similar to those given above. Claims 48, 49 and 51 set forth limitations similar as already discussed and therefore satisfied by the applied art for similar reasons. Claims 6, 16, 27, 35 and 47 are directed to reducing the current to produce a velocity profile that is reduced by 50% at a given distance from the ramp. Although not specifically discussed in the prior art such a feature would obviously be present in either applicants admitted prior art or Patten, III since the head eventually comes to a stop against a stop (0 velocity). At some point in time the velocity profile must obviously cross a 50% velocity from when the actuator initially starts moving toward the stop until a point in which it reaches the stop. The limitations of claims 36, 37 and 41 are similar to those already discussed and satisfied by the art as applied for similar reasons.

Allowable Subject Matter

Claims 9, 12, 19, 20, 30, 33, 38-40, 42, 50, 52 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The specific manner in which the derate factor is determined as set forth in claims 9, 19, 30, 38 and 50 is neither taught by nor an obvious variation of the art of record. The

specific manner in which the Warp-factor is determined as set forth in claims 12, 33, 42 and 52 is neither taught by nor an obvious variation of the art of record.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Mazda, Wilson, Utenick et al. and McKenzie et al. are cited as related to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Sniezek whose telephone number is 703-308-1602. The examiner can normally be reached on Mon.-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Andrew L. Sniezek
Primary Examiner
Art Unit 2651

A.L.S.
September 27, 2003